

# The Access Grid: A Cognitive-Performance Point of View

Greg Monaco, Ph.D.  
Research Collaboration Coordinator,  
The Great Plains Network

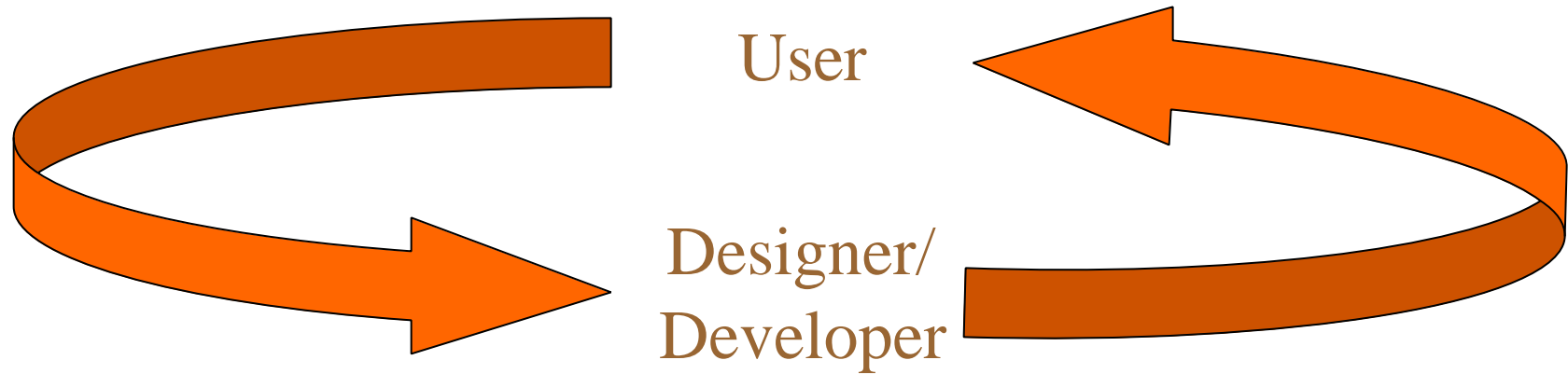
This Presentation Includes

- ☒ Feedback Loop
- ☒ Developer vs. User Characteristics
- ☒ Listening to Users
- ☒ An End User's Perspective
- ☒ Ultimate Human Factors Question
- ☒ A Simple Experiment
- ☒ About the Great Plains Network
- ☒ GPN Spring Member Meeting:  
“Networking Tools and Resources  
for Collaboration”



# Human Factors implies...


⌘ A *feedback loop*



This means that the designer is *listening* to the user!

But, developers are not always good at this.

# Typical Characteristics of Developers vs. Users



## Developers

- Visionary
  - see beyond the horizon
- Idealistic
  - look at what should be
  - “It’s a collaborative tool!”
- Project Sophisticated
  - know the technology
- Ego-Involved in the Project
  - The project is a reflection of talents, desires ...

## Users

- Immediate
  - looking to solve a specific problem
- Practical
  - look at what is
  - Let’s put SC2001 on the Grid
- Project Naïve
  - often don’t understand or care
- Ego-Involved in a Solution
  - The *pure* user cares about a successful implementation to meet immediate needs

# Listening to Users...

## Monaco's Rule



If no one says “This sucks!” you are probably asking the wrong people for feedback.

Developers often get feedback from

- ☒ people who are nearby
- ☒ people who agree with them
- ☒ people who aren't naïve to the goals of the project
- ☒ other developers

*It takes work to find a representative sample of users.*

# End User's Perspective



⌘ What exactly is an Access Grid Node?

- ☐ There is a lot of user confusion
- ☐ There are folks confusing the AG with the Computational Grid (maybe that's intended)

⌘ Who are the *users*?

- ☐ Some act as though the technical folks (operators) are the end users

⌘ Why not H.323?

# Human Factors II



Some exposures-configurations-experiences with the Access Grid are more compelling than others

What makes some experiences “better” than others?

- ☒ Is it the couch?
- ☒ Is it the content?
- ☒ Is it the video quality?
- ☒ Is it the “performance” of the other participants?
- ☒ Is it the amount of dead time?

# A Simple Experiment



## ⌘ Independent Variables:

- ☑ Video Quality
- ☑ Audio Quality
- ☑ Delivery Mechanism (AG node, Polycom Viewstation, live)
- ☑ Content

## ⌘ Dependent Variables

- ☑ User Satisfaction Ratings
- ☑ Memory for Content
- ☑ Number of Transactions (verbal exchanges)

# About the Great Plains Network

## ⌘ Advanced Networking Services & Collaborative Research Support

- ☒ a consortium of 14 universities
- ☒ serving 7 states
- ☒ potential Access Grid testbed

## ⌘ GPN Research Collaboration Pages

<http://research.greatplains.net>

Current News \* Meetings \* Research Projects

Funding Opportunities \* Awards

Research Tools and Techniques

[greg@greatplains.net](mailto:greg@greatplains.net)

next: GPN Spring Member Meeting



# Spring Member Meeting



## Networking Tools and Resources for Collaboration

April 19-20, 2001

University of Missouri, Kansas City  
Kansas City, Missouri

**Audience:** Researchers, IT-research liaisons, educators, and those who support the research and education mission via advanced networking technologies.

Check out the web site for more information!